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CLAIMS

1. A bite device for correct positioning of a patient for taking a radiograph with a panoramic X-ray device, comprising

5 a holding member (42) that can be located in a directionally stable position relative to said X-ray device, a plate (46) that can be pivoted relatively to said holding member and which exhibits a bite piece (50), on which the patient bites, and means (58, 60) for detecting the angle of deflection  $\alpha$  between said plate (46) and said holding member (42), which means are disposed in a region of the bite device (40) which is free from X-ray irradiation when the radiograph is taken.

15 2. A bite device as defined in claim 1, characterized in that means (58, 60) for detecting the angle of deflection  $\alpha$  comprise one or more sensors disposed in said holding member (42).

20 3. A bite device as defined in claim 1 or claim 2, characterized in that means for indicating the angular position of the pivoted plate (46) are provided.

25 4. A bite device as defined in any one of the previous claims, characterized in that driving means (15) are provided for vertical adjustment of said holding member (42) and thus to pivot said plate (46).

30 5. A bite device as defined in claim 4, characterized in that said driving means (15) move said plate (46) automatically into a predefined angular position and stop when said predefined angular position is attained.

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6. A bite device as defined in claim 4 or claim 5, characterized in that said driving means indicate when said predefined angular position of said plate (46) is attained by means of optical and/or acoustic signals.
- 5 7. A bite device as defined in any one of the previous claims, characterized in that said pivoted plate (46) is connected to a rail (54) which is disposed in said holding member (42), is capable of being moved upwardly and downwardly and has an opening (58) for the purpose of positioning said rail (54) in said holding member (42).
- 10 8. A bite device as defined in any one of the previous claims, characterized in that said bite piece is provided with a replaceable protective sheath.
- 15 9. A bite device as defined in any one of claims 1 to 7, characterized in that said bite piece is in the form of a replaceable bite piece (50).
10. A bite device as defined in claim 9, characterized in that said bite piece (50) is of a soft material.
- 20 11. A bite device as defined in claim 9 or claim 10, characterized in that said bite piece (50) is of a substantially radiolucent material.
12. A bite device as defined in any one of claims 9 to 11, characterized in that said bite piece (50) is made of closed-cell ethylene foam.
- 25 13. A bite device as defined in any one of claims 9 to 12, characterized in that said bite piece (50) occupies an angle  $\beta$  of the dental arch which ranges from  $20^\circ$  and  $40^\circ$  and is, in particular, approximately  $30^\circ$ .

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14. A bite device as defined in any one of claims 9 to 13, characterized in that said bite piece (50) has, on its upper surface and on its undersurface respectively, a bite groove (64, 66) for the accommodation of the dental arch of the upper and lower jaws of the patient.

5 15. A bite device as defined in any one of claims 9 to 14, characterized in that said bite piece (50) is a unitary piece and is foldable along a folding edge (70).

10 16. A bite device as defined in any one of claims 9 to 15, characterized in that said bite piece (50) has, on opposite sides thereof, a wedge-shaped tapered projection (76) and a complementary recess (78) for the accommodation of said projection (76) for releasably fitting said bite piece (50) to said pivoted plate 15 (46).